

REDUCED HOPPING SEQUENCES FOR A FREQUENCY HOPPING SYSTEM

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ABSTRACT OF THE DISCLOSURE

A frequency hopping system such as a Bluetooth system (300) can reduce the
10 number of RF channels it hops during a normal hopping sequence cycle providing for a
Reduced Hopping Sequence (RHS). A communication unit operating in the system such
as the Bluetooth master unit (302) determines if any of the RF channels has interference.
If any of the channels has interference, the Bluetooth master sends a message to one or
more slave units (304, 306) informing them of which channels will be removed from the
15 hopping sequence due to potential interference problems. The units will then use the new
RHS for their transmissions, thus avoiding the interference problems (e.g., both avoiding
interference in the system's receivers and avoiding creating interference on frequencies
that are already occupied by other neighboring systems).

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